

CORRECTION

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Heterodinuclear zinc and magnesium catalysts for epoxide/CO₂ ring opening copolymerizations[†]

Gemma Trott,^a Jennifer A. Garden^b and Charlotte K. Williams^{*a}Correction for 'Heterodinuclear zinc and magnesium catalysts for epoxide/CO₂ ring opening copolymerizations' by Gemma Trott *et al.*, *Chem. Sci.*, 2019, DOI: 10.1039/c9sc00385a.

In the original manuscript, an error was made in Table 2 for entries 1–3. Incorrect TON and TOF values were reported for compounds **2b**, **2c** and **2e** at a pressure of 1 bar. Also the PCHC selectivity values for **2b** and **2c** at 1 bar were incorrect. The correct

Table 2 Copolymerization reaction conditions^a

Cat.	Catalyst (mol%)	Temp. (°C)	Pressure (bar)	PCHC ^b (%)	TON ^b	TOF ^b (h ⁻¹)	M _n [D] ^b
2b	0.1	120	1	>96	377	435	12 280 [1.04] 5340 [1.13]
2c	0.1	120	1	>93	419	466	14 490 [1.06] 5930 [1.15]
2e	0.1	120	1	>99	430	645	21 760 [1.04] 9090 [1.15]
2c	0.01	120	20	>99	4415	8830	44 400 [1.04] 21 200 [1.05]
2c	0.005	120	20	>99	5435	1359	54 380 [1.04] 26 550 [1.04]

^a Reactions were carried out in a Parr high pressure vessel with an impeller at 20 bar. ^b See Table 1 and ESI for all data (Fig. S56–S60).

TON, TOF and PCHC values for these compounds are shown below:

To highlight this update, the sentence in the original manuscript "For the Zn(II)/Mg(II) complexes, the best activity value reaches 654 h⁻¹ which is at the upper end of values for the low pressure regime.^{10,14,15}" on page 7 should now read "For the Zn(II)/Mg(II) complexes, the best activity value reaches 645 h⁻¹ which is at the upper end of values for the low pressure regime.^{10,14,15}"

Finally, a corrected version of Fig. 4 is also provided here to highlight the correct TOF value for complex **2e**.

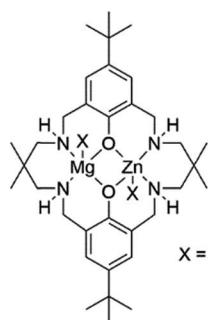
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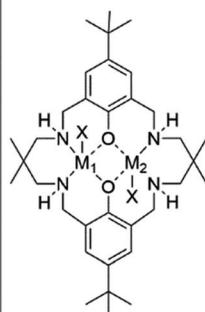
† Electronic supplementary information (ESI) available. See DOI: 10.1039/C9SC00385A



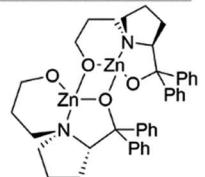
This Study



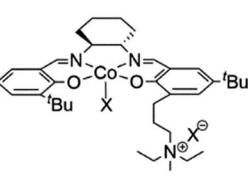
2c: R = CF₃ **TOF = 8830 h⁻¹** [99 %, 120 °C, 20 bar, 0.01 mol%]
2d: R = NO₂ **TOF = 124 h⁻¹** [99 %, 80 °C, 1 bar, 0.1 mol%]
2e: R = NMe₂ **TOF = 645 h⁻¹** [99 %, 120 °C, 1 bar, 0.1 mol%]

Catalysts at 1 bar CO₂ Pressure

M₁ = M₂ = Zn, X = OAc
TOF = 18 h⁻¹
M₁ = M₂ = Mg, X = OAc
TOF = 30 h⁻¹
M₁ = Mg, M₂ = Zn, X = Br
TOF = 34 h⁻¹
[99 %, 80 °C, 0.1 mol%]



TOF = 149 h⁻¹
[98 %, 80 °C, 0.1 mol%]

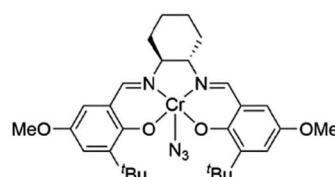


X = 2,4-dinitrophenolate
TOF = 263 h⁻¹
[99 %, 50 °C, 0.02 mol%]

Catalysts at >10 bar CO₂ Pressure

BEt₃ + PPNCl

TOF = 600 h⁻¹
[99 %, 80 °C, 10 bar, 0.03 mol%]



+ PPNCl
TOF = 1153 h⁻¹
[99 %, 80 °C, 35 bar, 0.04 mol%]



TOF = 155, 000 h⁻¹
[88 %, 100 °C, 30 bar, 0.013 mol%]

Fig. 4 Illustration of the structures, activity and selectivity for some of the highest performing catalysts reported for CO₂/CHO ROCOP.^{22,25,33,34,59,61}

The original ESI was replaced by a correspondingly revised version on 16th May 2019 to reflect these changes.

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.

